

III. CLAIM AMENDMENTS

1. (Currently Amended) A method ~~(300,400,500)~~ for transmitting a certain sequence of symbols, said method comprising, ~~where~~
~~-constructing a frame is constructed~~ of a certain number of consecutive symbols,

~~-transmitting the symbols belonging to the sequence are transmitted~~ ~~(404, 502, 606)~~ using at least two antennas, ~~and~~

~~-wherein the transmission of the sequence of symbols is characterized~~ ~~(401,601)~~ with a certain transmission pattern, ~~characterized in that~~

~~-starting the transmission of the sequence of symbols is started~~ ~~(402)~~ from a predefined antenna, and

~~-starting the transmission pattern is started~~ ~~(403, 405)~~ from the beginning in the beginning of each frame.

2. (Currently Amended) A method ~~(500,600)~~ according to claim 1, ~~wherein:~~

~~-the length of the transmission pattern is shorter than the length of a frame, and~~

~~-the length of the frame is not a multiple of the length of the transmission pattern,~~

~~said method further comprising, characterized in that during each frame:~~

~~-repeating the transmission pattern is repeated~~ ~~(502)~~ until the length of the rest of the frame, which length is the length of the transmission pattern multiplied by the number of the repetition times within the frame subtracted from the length of

the frame, is less than the length of the transmission pattern,
and

-thereafter using only a certain part, ~~whose~~ having a length
which is the length of the rest of the frame, ~~is less than the~~
~~length of the transmission pattern is used (503).~~

3. (Currently Amended) A method according to claim 2,
~~characterized in that~~ further comprising selecting the part of the
~~transmission pattern is selected (609)~~ from the beginning of the
transmission pattern.

4. (Currently Amended) A method according to claim 2,
~~characterized in that~~ wherein the length of the transmission
pattern is an even number and the length of the frame is an odd
number.

5. (Currently Amended) A method according to claim 4, where
further comprising transmitting the sequence of symbols is
~~transmitted using a first antenna and a second antenna,~~
~~characterized in that~~ wherein the transmission pattern is an
alternating pattern and the length of the transmission pattern is
two.

6. (Currently Amended) A method according to claim 1, wherein
each frame ~~consists of~~ comprises a certain number of consecutive
time slots and each time slot ~~consists of~~ comprises a certain
number of consecutive symbols, ~~characterized in that~~ and said
method further comprises transmitting one symbol belonging to the
sequence of symbols is transmitted in each time slot.

7. (Currently Amended) A method according to claim 1, wherein each frame ~~consists of~~ comprises a certain number of consecutive time slots and each time slot comprises ~~consists of~~ a certain number of consecutive symbols, ~~characterized in that~~ and said method further comprises transmitting at least one symbol belonging to the sequence of symbols ~~is transmitted~~ in each time slot.

8. (Currently Amended) A method according to claim 1, wherein each frame ~~consists of~~ comprises a certain number of consecutive time slots and each time slot ~~consists of~~ comprises a certain number of consecutive symbols, ~~characterized in that~~ and said method further comprises transmitting at least in one of the time slots at least one symbol belonging to the sequence of symbols ~~is transmitted~~.

9. (Currently Amended) A method according to claim 1, ~~characterized in that~~ wherein the length of the transmission pattern is larger than the length of the frame.

10. (Currently Amended) A method according to claim 1, ~~characterized in that~~ said method further comprising starting the transmission of the sequence of symbols ~~is started~~ from the primary antenna that transmits the ~~a~~ common pilot signal.

11. (Currently Amended) A method according to claim 1, ~~characterized in that~~ said method further comprising transmitting

the sequence of symbols ~~is transmitted in a~~ downlink direction in a cellular network.

12. (Currently Amended) An arrangement comprising: (700), ~~which comprises control means (701)~~

a controller for controlling the transmission of a sequence of symbols according to a certain transmission pattern ~~and using~~ through at least two antennas, ~~characterized in that it further comprises~~

~~-indication means (702)~~ an indicator for indicating the antenna from which to transmit the first symbol belonging to the sequence, and

~~-starting means (703)~~ a starter for starting the transmission pattern from the beginning in the beginning of a frame.

13. (Currently Amended) A network element comprising: (710), ~~which comprises control means (701)~~

a controller for controlling the transmission of a sequence of symbols according to a certain transmission pattern, ~~and using~~ at least two antennas to transmit said sequence, ~~characterized in that it further comprises~~

~~-indication means (702)~~ an indicator for indicating the antenna from which to transmit the first symbol belonging to the sequence, and

~~-starting means (703)~~ a starter for starting the transmission pattern from the beginning in the beginning of a frame.

14. (Currently Amended) A network element according to claim 13, ~~characterized in that it is~~ wherein said network element comprises a radio network controller of a spread spectrum system.

15. (Currently Amended) A network element according to claim 13, ~~characterized in that it~~ further comprising ~~comprises~~ at least two antennas ~~(721, 722)~~.

16. (Currently Amended) A network element according to claim 15, ~~characterized in that~~ wherein said network element comprises it ~~is~~ a base station of a spread spectrum system.

17. (New) A computer program product comprising:

a computer useable medium having computer readable code embodied therein for causing a computer to activate functions of a device, the computer readable code in the computer program product comprising:

-a computer readable code for causing a computer to construct a frame of a certain number of consecutive symbols,

-a computer readable code for causing a computer to transmit the symbols belonging to the sequence using at least two antennas,

-wherein the transmission of the sequence of symbols is with a certain transmission pattern,

-a computer readable code for causing a computer to start the transmission of the sequence of symbols from a predefined antenna, and

-a computer readable code for causing a computer to start the transmission pattern from the beginning in the beginning of each frame.